

positions during the sequence. It will be understood, however, that the 8 minute cycle is merely illustrative and other time cycles may be employed in practice of this invention."

Table 1 defines each stage in terms of seconds in the cycle e.g. stage 2 lasts from 10-60 seconds as measured by the start of the cycle.

While Sircar et al. does not specifically state anywhere in the disclosure how the valves are opened and closed, it is obvious from the cycle outlined in Table 1, the above quote from the disclosure and the overall complexity that a timing controller is used to control the opening and closing of the valves. Sircar et al. does not teach or in any way render obvious the use of the level of pressure in an adsorption column to control the purge cycle.

The pressurizable storage means of the claim corresponds directly to vessel 27 of Sircar et al. and not any of the other vessels described. This is the only vessel to receive the enriched stream as required by limitation (b) of claim 16. Vessel 27 is isolated from any of the purging means. After the timing controller closes valve 24 (thus isolating vessel 27 from adsorbent column 10), the adsorbent column is rinsed with nitrogen from vessel 41 (see col. 4, lns. 3-6). The excess nitrogen and remaining air pass into vessel 45 for preparing the column for the next adsorption cycle. It is only at this point (with vessel 27 still isolated) that the purging of adsorbent column 10 begins with the nitrogen being drawn out by suction through valve 34 and pump 40 (see col 4, lns. 20-32).

Claim 16 requires a connection between the pressure in vessel 27 and the start of the purging cycle. Sircar et al. teaches no connection between the operation of pump 40 and the pressure in vessel 27, let alone an actuation of pump 40 or valve 34 to begin the purging cycle.

The pressure in vessel 27 varies throughout the cycle as vessel 27 receives oxygen enriched gas from both columns 10 and 11 alternately and oxygen enriched gas is withdrawn from vessel 27 by pump 28. Some oxygen enriched gas is then returned to the columns after the purging is complete to repressurize the adsorbent columns.

In view of the foregoing comments, the applicant respectfully submits that claim 16 and the claims dependent thereon are not anticipated or in any way rendered obvious by Sircar et al.

The applicant also submits that claim 28 is also not anticipated by Sircar et al. The applicant repeats and relies on the arguments made above.

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The applicant submits that it would be apparent to a person skilled in the art that the opening and closing of the valves in Sircar et al. is clearly controlled by a timing controller. The sheer complexity of the apparatus, and the disclosure at col. 5 lns. 32-38 make this clear. Sircar et al. does not teach anywhere that any of the valves are pressure actuated. In the face of the complex nature of the apparatus, such a teaching cannot be implied. In view of the foregoing comments, the applicant respectfully submits that claim 28 is not anticipated or in any way rendered obvious by Sircar et al.

The applicant also submits that claim 35 is not anticipated by Sircar et al.

The applicant has amended step (c) of claim 35 to clarify that the enriched fluid is used to "pressurize a member to commence a purge cycle". As discussed above, the increased pressure in vessel 27 of Sircar et al. is not used to commence the purge cycle. In view of the foregoing arguments, the applicant respectfully submits that claim 35 and the claims dependent thereon are not anticipated or in any way rendered obvious by Sircar et al.

In view of the foregoing comments, the applicant respectfully submits that the application is now in condition for allowance. If the Examiner should have any further concerns regarding the application, the Examiner is respectfully requested to contact the undersigned at (416) 957-1695.

Respectfully submitted,

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